

Year 3 Maths No Problem lesson plans Chapter 11, Lesson 28 – 30, Mind workouts and Review 11 and Chapter 12, lessons 1 - 2, week beginning 15/06/20

Lesson 28: Solving Word Problems

Textbook pages: 187 – 188

Lesson Objective

To be able to solve word problems involving addition and subtraction of fractions with the same denominator.

Lesson Approach

To begin this lesson, show pupils with the In Focus task and ask them to come up with as many questions as possible about this scenario. Prompt pupils to use addition, subtraction, more, less, greater than, less than and so on. Structure the main methods/questions using the Let's Learn tasks.

During Guided Practice, pupils are applying their understanding of fractions to solve the word problem. This will involve adding fractions with the same denominator. Encourage pupils to simplify the fraction after adding.

Lesson 29: Solving Word Problems

Textbook pages: 189 – 190

Lesson Objective

To be able to solve word problems involving fractions.

Lesson Approach

To begin this lesson, provide pupils with strips of paper that can be used as bar models. Show them the In Focus task and discuss the problem, helping them to identify the information given. Tell them your friend said that it cannot be solved because you don't know how many sweets all of the children took. Is this true? Are there clues to help us? How can we know? Tell pupils that you solved the problem using bar models.

Allow the class time to work on this problem before working through the details in Let's Learn. If a bar represents the 6 sweets Emma took, what would Elliott's bar look like? What about Lulu's? Using the pictures and the information we know about Emma, can we figure out how many sweets the other children took? Organise the thinking and responses of the pupils into a chart to show the relationships between the numbers.

During Guided Practice, pupils will be solving similar problems using bar models to represent amounts. It is important that the bar models are labelled correctly and accurately.

Lesson 30: Solving Word Problems

Lesson Objective

To be able to solve word problems involving fractions and measurements.

Lesson Approach

To begin this lesson, show pupils the In Focus task and ask them to solve the problem in as many ways as they can. Tell them your friend said they could show the answer to this problem using three different methods (by drawing on the calendar, drawing bar models and using division). How many methods can they show? Allow pupils sufficient time to work on a variety of ways to solve this problem. Structure the responses in line with the Let's Learn tasks from the simplest to more complex ideas.

During Guided Practice, pupils are finding fractions of quantities using bar models as the primary method. Pupils may choose to use other strategies as well.

Lesson 31: Chapter Consolidation

Textbook pages: 194

Lesson Objective

To be able to use knowledge of fractions to solve problems.

Lesson Approach

Mind Workout

Pupils explain their reasoning behind a fraction problem and illustrate this using a number line. Textbook page 193, workbook page 129.

Maths Journal

Pupils draw diagrams to complete the fraction sums and describe how the numerators and denominators change during addition and subtraction, page 194 in the textbook.

Self Check

Pupils complete this as a chapter summary and discuss what to do with their teacher if any boxes are not ticked, page 194 in the textbook.

Review 11, completed independently. Pages 130 – 134.

Chapter 12, Lesson 1: Making Angles

Textbook pages: 196 – 198

Lesson Objective

To be able to recognise angles as a description of a turn.

Lesson Approach

To begin this lesson, show the pupils the In Focus task and ask them to talk about the hour and minute hands on the clock. Use an analogue clock to show the movement of the hour hand clockwise from 12 o'clock to 3 o'clock. Tell pupils that this turn marked by the hour hand and minute hand is called an angle. Then draw the clock face showing 3 o'clock and mark the angle between the two hands.

Next, show the movement of the hour hand anti-clockwise from 12 o'clock to 11 o'clock. Ask pupils where the angle is. How can they be sure? Draw the clock face for 11 o'clock and mark the angle. Guide pupils to see that an angle is formed when two straight lines meet at a point and we can mark it to show it clearly. Then give them a copy of the clock face for Frankfurt and ask them to mark the angle. Label each of these angles: a, b and c. Explain to pupils that we can differentiate angles by labelling them.

During Guided Practice, pupils are making angles using pencils. Ask them which sticks make angles and why. How do they know? Pupils are also asked to make angles that are bigger and smaller than the one shown. What does this mean? Tell them your friend said all you have to do is make longer lines. Is this correct? Does the length of the line have anything to do with the angle they make? Allow pupils to explore this idea.

Lesson 2: Making Angles

Textbook pages: 199

Lesson Objective

To be able to recognise angles as a description of a turn.

Lesson Approach

To begin this lesson, show pupils the In Focus task and ask them to discuss which child is correct and why. Guide them to use the properties of an angle (two straight lines meeting at a point) to explain their reasoning.

During Guided Practice, pupils are looking for angles on letters.